DECLARATION OF GI-UP CHO

- I, Gi-up Cho, declare that the following statements are true and correct.
- 1. I, Gi-up Cho, am currently the General Manager of Digital Television (DTV) Patent Group, IP Center at LG Electronics Co. Ltd., (LGE). I have a Bachelor's degree in electrical engineering from Kon-Kuk University in Korea. From 1984, I have been actively involved in the Digital TV industry at LG Electronics and I am very familiar with the adoption and development of new technologies concerning television.
- 2. In 2003, LGE bought Triveni Digital because of their expertise in DTV technology and their patent application portfolio covering the DTV technology.
- 3. The patent applications obtained by LGE through the purchase of Triveni Digital include the family of patent applications titled "Information Descriptor And Extended Information Descriptor Data Structures for Digital Television Signals." The inventor of these patent applications, Mark Corl, discloses important aspects of the Advanced Electronic Programming Guide, and in particular, the Genre Descriptor.
- 4. The above-mentioned patent applications disclose a Genre Descriptor that is in an event information table (EIT) and that includes at least one attribute code value for an associated event in the DTV stream. Each attribute code value specifies a basic genre or category type or detail attribute for the associated event. The attribute code value matches a value in a categorical genre code assignments table defined in the Advanced Television Standards Committee (ATSC) A/65 standard. In this manner, linkage of the categorical genre code assignments table to events defined in the Eff can be provided. By linking EIT events to the same categorical genre code assignments table that has been previously defined in the ATSC A/65, the Genre Descriptor of the present invention provides for bandwidth and memory optimization. By using the categorical

genre code assignments table, a complete description of the one or more genre does not need to be sent through the DTV stream. Rather, only the codes corresponding to the genres need to be sent. Also, the Genre Descriptor enables an associated event to be filtered and allows for better service to the user in finding a specific content.

- 5. Subsequent to the filing of the patent applications, the Advanced Television Systems Committee (ATSC) adopted a Genre Descriptor scheme into the ATSC standard that is covered by the invention of Mark Corl. ATSC is a standards organization that was created in 1982 as part of an advanced television committee to promote the establishment of technical standards for all aspects of advanced television systems. Although there are so many techniques that could have been used, the ATSC chose a Genre Descriptor scheme that is covered by the invention of Mark Corl to become an industry standard, and to meet an important industry need.
- 6. The ATSC A/65 includes both mandatory and non-mandatory requirements. The Genre Descriptor scheme is covered by a mandatory requirement of ATSC A/65. Currently, all DTV receivers manufactured by LGE use the Genre Descriptor scheme of the ATSC A/65. Moreover, to comply with the ATSC A/65 standard, all DTV transmitters and DTV receivers have copied the Genre Descriptor scheme covered by the invention of Mark Corl.
- 7. Accordingly, the entire DTV industry uses the Genre Descriptor scheme covered by the invention of Mark Corl.
- 8. I declare that all statements made herein of my own knowledge are true, and that all statements on information and belief to be true; and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Gi-up Cylo

Executed on this 11th day of October, 2010